Initial recommendations of the 30 by 30 Monitoring and Evidence Expert Group for Wales

Executive summary

To support nature's recovery, the Welsh Government's Biodiversity Deep Dive developed a set of collective actions. The 30 by 30 target was chosen as a strategic focus to consider where and how action could be accelerated thereby conserving and effectively managing at least 30% of our land, freshwater, and seas for biodiversity by 2030. It is one of a number of targets which form part of the Global Biodiversity Framework (GBF).

Effective and affordable monitoring and evidence frameworks are vital to track our progress towards both the 30 by 30 target and the longer-term nature positive ambition. They underpin decision making, to enable an adaptive management approach which is necessary to deliver resilient ecosystems able to adapt to wider pressures such as climate change. These frameworks need to be informed by an appraisal of data needs, building on existing good practice and data sets, and identifying what is needed in the future. Also creating opportunities for better collaboration, an increased role for citizen science and making better use of technological advances.

The Deep Dive monitoring and evidence expert group (the group) was established in May 2023 in response to the recommendations from the 2022 Biodiversity Deep Dive.

The group met monthly to:

- Develop and adapt monitoring and evidence frameworks to measure progress towards the 30 by 30 target and guide prioritisation of action;
- Continue the work needed to establish robust and appropriate monitoring and evidence frameworks for 30 by 30 and wider nature recovery targets, building on those that are already in place.

Membership was drawn from Welsh Government, agencies, academia, eNGOs, and National Park Authorities, bringing together key areas of technical expertise, policy work and delivery.

The report reflects the views of the expert group and outlines the progress towards the monitoring and evidence recommendation in the Deep Dive. The group's work was undertaken under the following seven themes:

- Understanding and reviewing current monitoring in Wales,
- Defining the monitoring components of the 30 by 30 target (target three of the GBF),
- Developing a monitoring framework,
- Identifying evidence sources and gaps,
- Identifying development needs,

- Considering options for delivery,
- Identifying recommendations and next steps.

The report explores the themes discussed, progress made to date and emerging recommendations, followed by next steps.

An initial starting point for work was to understand the wide array of monitoring being undertaken in Wales to help inform the approach to the 30 by 30 target and identify opportunities.

The group explored a range of conceptual models to ensure any framework had the potential to address evidence needs at a range of scales whilst having regard to Sustainable Management of Natural Resources (SMNR) principles and the drivers and pressures impacting the environment.

A range of potential metrics were selected based on their potential measurability, precision, consistency, and sensitivity. They were split into three areas, each with a specific role to play in evaluation:

- **Delivery** – ensuring we are clear over achievement of target three.
- **Tracking** – providing a clear map of progress in delivery across a range of aspects of target three.
- **Outcome Assurance** – ensuring that outcomes are producing the desired impact.

Issues and evidence challenges were identified which would impact delivery, these require further development work before costed options can be produced.
The priority development areas include the following:

- *evidence generation* using both traditional and innovative approaches.
- *evidence collation and sharing*. Key to success is the development, implementation and maintenance of robust evidence platforms.
- a robust yet simple mechanism is needed for evaluation of *effective management* applied across both protected areas and Other Effective Area-based Conservation Measures (OECMs) to encompass the potentially large diversity of management approaches.
- given the wide range of potential partners who will need to work collaboratively, effective *governance* through clear roles and responsibilities needs to be established.
- additional *resources* and realignment of current resources will be necessary to support delivery of this work.

The group sets out in Table 1 the recommended monitoring framework to evaluate target three and in Table 2 the recommended evidence sources required for delivery of target three. The suggested metrics may have differing implications across the environmental domains, not only as a result of the way ecological processes work in different environments but also as a result of the history of evidence collection in these environments.

Monitoring framework recommendations

Table 1: Recommended monitoring framework to evaluate delivery of target 3.

Type of metric	Metric for protected areas and OECMs	Data source	Application
Delivery	Area of land and freshwater which satisfy the inclusion criteria. Area of sea which satisfy the inclusion criteria.	Data infrastructure development and implementation is required.	A measure of delivery of the 30% target, showing what proportion of Wales across land, freshwater, sea now meeting the inclusion criteria as a protected area or OECM under effective management.
Tracking	Protected area classed as effectively managed and the area on a pathway to effective management. OECM area data classed as effectively managed and the area on a pathway to effective management.	Data infrastructure development and implementation is required depending on the outcomes of the case study exercise.	A tracking measure showing the area of both protected area and OECMs which are either now included in the delivery target as a result of achieving effective management or are on a pathway to delivering effective management.
	Connectivity in freshwater, terrestrial and marine environments.	To be developed – this will depend on the nature of the metrics used.	A tracking measure showing the changes to connectivity as the inclusion of areas for target three develops.
	Ecosystem representation.	To be developed.	A tracking measure exploring how the representation of ecosystems in target three evolves as implementation develops. To be implemented only if a suitable measure can be identified.
Outcomes	Welsh level Biodiversity and Ecosystem integrity	A potential combination of UK level biodiversity surveillance scheme data where Welsh level trends are available, plus further biodiversity or ecosystem function data. All needing development work.	An assurance measure to explore how wider biodiversity is changing as the implementation of 30 by 30 develops. To be further developed following Earth Observation work.

Evidence framework recommendations

Table 2: Recommended evidence sources required for delivery of target 3.

Type of metric	Metric for protected areas and OECMs	Evidence source
Delivery	Area of land and freshwater which satisfy the inclusion criteria. Area of sea which satisfy the inclusion criteria.	Evidence on the type of site (protected areas, OECM) and its area which satisfy the criteria for inclusion.
Tracking	Protected area classed as effectively managed and the area on a pathway to effective management. OECM area data classed as effectively managed and the area on a pathway to effective management.	Evidence on the effective management of protected areas or OECMs, including: • The type and governance arrangements for the area. • The conservation objectives for the area. • The implementation of management measures for the area. • The extent, nature, suitability and frequency of the monitoring undertaken for the area. • The extent of achievement of the conservation objectives. • The level of confidence in the assessment of achievement of conservation objectives.
	Connectivity	To be confirmed - Pending agreement on the measurement of connectivity.
	Ecosystem representation	To be confirmed - Pending agreement on the measurement of representation.
Outcome	Welsh level Biodiversity and Ecosystem integrity.	UK level biodiversity surveillance scheme data where Welsh level trends are available plus clarified evidence needs following further development work around ecosystem function or integrity linked to Earth Observation developments.

Establishing a community of practice to build collaboration and oversee and coordinate delivery of the workstreams would support implementation of the framework. The group developed key principles to inform the next stages in delivery. It is hoped these principles together with the recommended framework, development areas and proposed collaborations will contribute to the route map for 2030.

Delivery principles

During discussions a number of emerging principles were noted and are summarised below.

● Engaging with and delivery through others:
There is a clear social aspect to the target and we need to ensure systems are in place to engage with others in effective and meaningful ways. Ensuring local communities & their skills and knowledge are able to be part of the process of identifying opportunities and directing delivery.

● Ensuring equitable governance:
Equitable governance as defined by the GBF will be embedded in every aspect of representation, decision making and distribution that relates to the work of this group moving forwards.

- Sharing enabling data:
  Adequate, effective data availability is key to enabling both informed delivery on the ground and national level planning. Ensuring the FAIR principles are adopted in our data is key i.e. findability, accessibility, interoperability, and reusability. In some cases, this will need to be supported by subject matter experts to enable effective use.
- Tracking progress:
  Delivering ecosystem change can take time, be complex and is often challenging. Given such issues we will need to ensure our metrics are sensitive enough to start to demonstrate early change to help map and understand progress. Such tracking will also enable the communication of the route to delivery.
- Understanding baselines:
  To understand how we are progressing there is a need to have a clear understanding of our baseline against which we can track progress.
- Being realistic over delivery:
  There is a collective recognition that delivery needs to sit within tight fiscal constraints together with the practical time constraints associated with the work. However, delivery is not cost neutral and appropriate resourcing will be necessary.
- Recognising target three as part of a suite of targets:
  Given the suite of targets set down under the GBF, it is sensible not to regard target three in isolation but as part of a wider series of targets each focussing on different aspects of action or outcome aiming at achievement of the 2050 vision.

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